Florida Scientist

QUARTERLY JOURNAL
of the
FLORIDA ACADEMY OF SCIENCES

VOLUME 36

Editor

HARVEY A. MILLER

Published by the

FLORIDA ACADEMY OF SCIENCES, INC.
Orlando, Florida
1973

The Florida Scientist continues the series formerly issued as the Quarterly Journal of the Florida Academy of Sciences. The Annual Program Issue is published independently of the journal and is issued as a separately paged Supplement.

Copyright © by the Florida Academy of Sciences, Inc. 1974

CONTENTS OF VOLUME 36

Number 1

Editorial — *Harvey A. Miller* — 1
BCH formulas in superfluid physics — *Robert Gilmore* — 2
The role of the aquatic exchange of carbon dioxide in the ecology of the water hyacinth (*Eichhornia crassipes*) — *Gordon R. Ultsch and David S. Anthony* — 16
Ecological studies of the apple snail at Lake Woodruff National Wildlife Refuge — *Matthew C. Perry* — 22
Cave dwelling yellow bullheads in Florida — *Kenneth Relyea and Bruce Sutton* — 31
Physical science with a new direction — *Frank M. Dudley* — 35
The University of Florida in World War II — *George Osborn* — 38
Mean high water mark and use of tidelands in Florida — *Maurice W. Provost* — 50
Studies on mangrove algal communities in Puerto Rico — *Paul R. Burkholder and Luis R. Almodóvar* — 66
Acidities of some cyclopentanepolyones — *J. F. Fernandez, R. D. Whitaker, Miguel Fernandez and Jon Simon* — 75
Academic achievement of dyslexic children during the first twelve months after intensive remediation — *Anita N. Griffiths* — 78
Charcoal making: Its effect in Cajola, Guatemala — *John G. Hehr* — 85
An unusual distribution of *Tillandsia sinulata* Small — *Hal A. Beecher and Lucy Duncan* — 91
Preliminary electron microscope observations of citrus with young tree decline — *Gail E. VanderMolen* — 92

Number 2-4

The tunnel system structure of the southeastern pocket gopher — *Larry N. Brown and Graham C. Hickman* — 97
Biscayne Bay: Bacteriological data interpretation — *Charles P. Gerba and George E. Schaiberger* — 104
Military herbicide driftage and Florida vegetation — *Daniel B. Ward and Carl J. Chapman* — 110
Effects of variable brain wave control on digital recall — *Michael S. Heffernan* — 123
Epiphytism in the marine benthic algae of Puerto Rico — *Julio N. Navarro and Luis R. Almodóvar* — 128
Experimental insular biogeography: Ponds as islands — *Michael D. Hubbard* — 132
Antipyretics and heat tolerance of white leghorn chicks — *H. R. Wilson, A. E. Armas, I. J. Ross, C. D. Baird and R. A. Voitle* — 142
Chlorophyll studies in a southern hardwood forest in north central Florida — *Ariel E. Lugo, Terry Ramsey and Jill Hoy* — 146
Preliminary thermal studies on young *Panulirus argus* — *Ross Witham* — 154
Milo diets with added sulfate fed to rats — *W. E. Maxson and R. L. Shirley* — 159

Mesenterial filaments from *Manicini areolata* (Linn.) *Raymond K. Duros* 164
Egg-bearing in the troglobitic crayfish *Procambarus pallidus* (Hobbs)
Kenneth Relyea and Bruce Sutton 17?
A new species of brittle star from Florida *Robert L. Singletary* 175
Ochlockonee River fishes: Salinity-temperature effects
Patrick R. Parrish and Ralph W. Yerger 179
Observations on a female oarfish (*Regalecus glesne*)
Carl H. Saloman, Martin A. Moe, Jr. and John L. Taylor 187
Spiders in the summer diet of cattle egrets
Michael J. Fogarty and Howard K. Wallace 189
Polychaete fauna associated with Gulf of Mexico sponges *Daniel M. Dauer* 192
An unusual estuarine record of oceanic squid, *Cranchia scabra* *Eldon J. Levi* 196
Aniseia martinicensis: An adventive in Florida *Daniel F. Austin* 197
The spotted turtle in Florida and southern Georgia
James F. Berry and Culver S. Gidden 198
Pugheadedness in the Florida largemouth bass *Micropterus salmoides Floridanus* (Lesueur) *Robert L. Chew* 201
Freshwater algae from the Dade-Collier jetport *Norman Richardson* 205
Range extension of *Penaeus setiferus* (Linnaeus) to Tampa Bay, Florida
Carl H. Saloman 208
Range extension for the scorpionfish *Scorpaena isthmensis*
John D. McEachran and William N. Eschmeyer 209
Discovery of the gastropod snail *Melanoides (Thiara) tuberculata* (Muller) in Florida *Thomas N. Russo* 212
Range extension of *Centropristis striata melana*
William N. Lindall, Jr., William A. Fable, Jr. and L. Alan Collins 214
Melanism in Florida bobcats *John Paradiso* 215
Mosquito flight and night relative humidity in Florida *Maurice W. Provost* 217
A bacterial disease of hatchling loggerhead sea turtles *Ross Witham* 226
Growth of hydrilla in solution culture at various nutrient levels
Kerry K. Steward and R. A. Elliston 228
Ecological data for a Florida troglobitic crayfish
Kenneth Relyea and Bruce Sutton 234
Membership list, Florida Academy of Sciences 236